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Manufacturing and Supply Chain and Asset Management in SAP S/4HANA Cloud
2002 Release Update

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February 18, 2020

THE BEST RUN **SAP**

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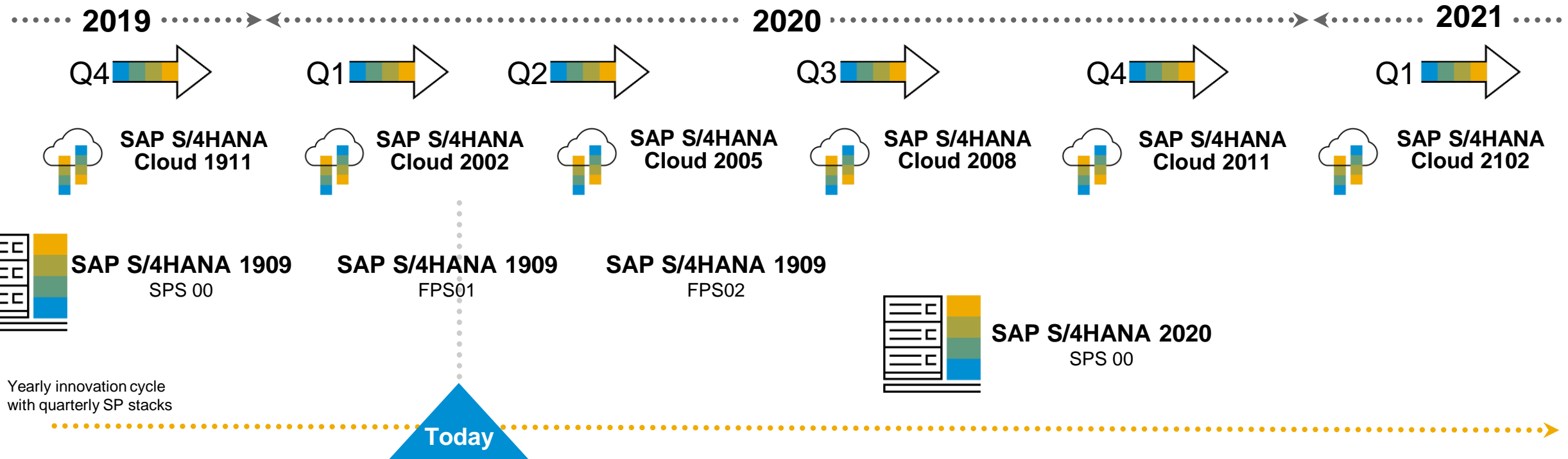as of their dates, and they should not be relied upon in making purchasing decisions.

SAP S/4HANA Release Strategy
(2019–2021 and definition of deliveries)

SAP Note 2868297 - Release Information Note for SAP S/4HANA Cloud 2002
SAP Note 2868331 - Release Restriction Note for SAP S/4HANA Cloud 2002

Quarterly innovation cycle

2019   **2020**   **2021**

Q4   Q1   Q2   Q3   Q4   Q1

SAP S/4HANA Cloud 1911

SAP S/4HANA Cloud 2002

SAP S/4HANA Cloud 2005

SAP S/4HANA Cloud 2008

SAP S/4HANA Cloud 2011

SAP S/4HANA Cloud 2102

SAP S/4HANA 1909
SPS 00

SAP S/4HANA 1909
FPS01

SAP S/4HANA 1909
FPS02

SAP S/4HANA 2020
SPS 00

Yearly innovation cycle
with quarterly SP stacks

Today

Agenda

Manufacturing & Supply Chain & Asset Management in SAP S/4HANA Cloud 2002

- Warehouse Management

  - Lean integration between production and warehouse managed on bin level
  - Serial Number Handling in Warehouse Management
  - Attachment Services in Warehouse Management
  - Reduce manual efforts by running warehouse task creation in the background

- Inventory Management - Cycle counting as part of the physical inventory process

- Quality Management
  - Resolve internal problems by using the 8D methodology
  - Inspection results recording for serialized materials

- Production planning and execution
  - Predictive material and resource planning (pMRP)
  - Schedule Production
  - Manage Work Center Capacity
  - Reprocess failed material movements

- Resource Scheduling for Maintenance Planners

Key Innovations in S/4HANA Manufacturing & Supply Chain

aATP
- Customer segmentation
- Automated mass order processing using alternative variants
- Manage shortages along with business priorities
- Improve business rules
- Fast re-plan
- Plant and Material Substitution

DDMRP
- Overcome increasing volatility in demand and shorten lead-time
- Keep inventory at the most optimum amount to deal with variation at minimum cost across the chain
- Driving replenishment on actual demand, not forecasts. The best use of assets is to make what is needed and what sells.
- Propose decoupling points and buffer levels

pMRP
- Simulate future scenarios for the plant to predict capacity and component demand

Quality Management
- Defect code proposal based on problem description
- Closed Loop Inspection Planning using Failure Mode and Effect Analysis

Inventory Management
- Predict arrival and manage delivery delays for Stock in Transit
- Pre-built set of Inventory KPIs for analytics with drill down functionality
- Early detection of slow or non-moving stock
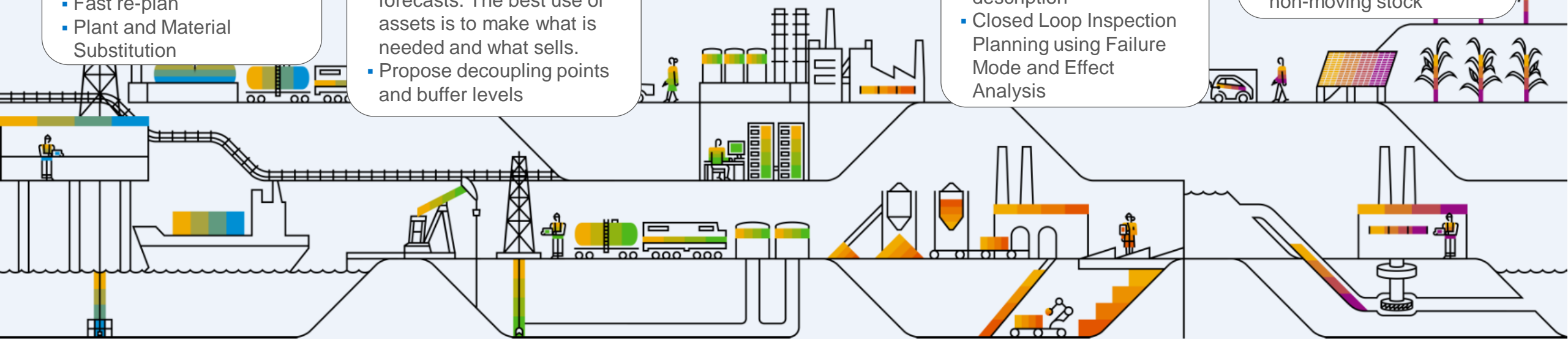
Release Highlights
Warehouse Management

SAP S/4HANA Cloud - Warehousing

Since 1708

Since 1805

Since 1811

Inventory Management

Third-Party Warehouse Management System

SAP EWM 9.5

Warehouse Management
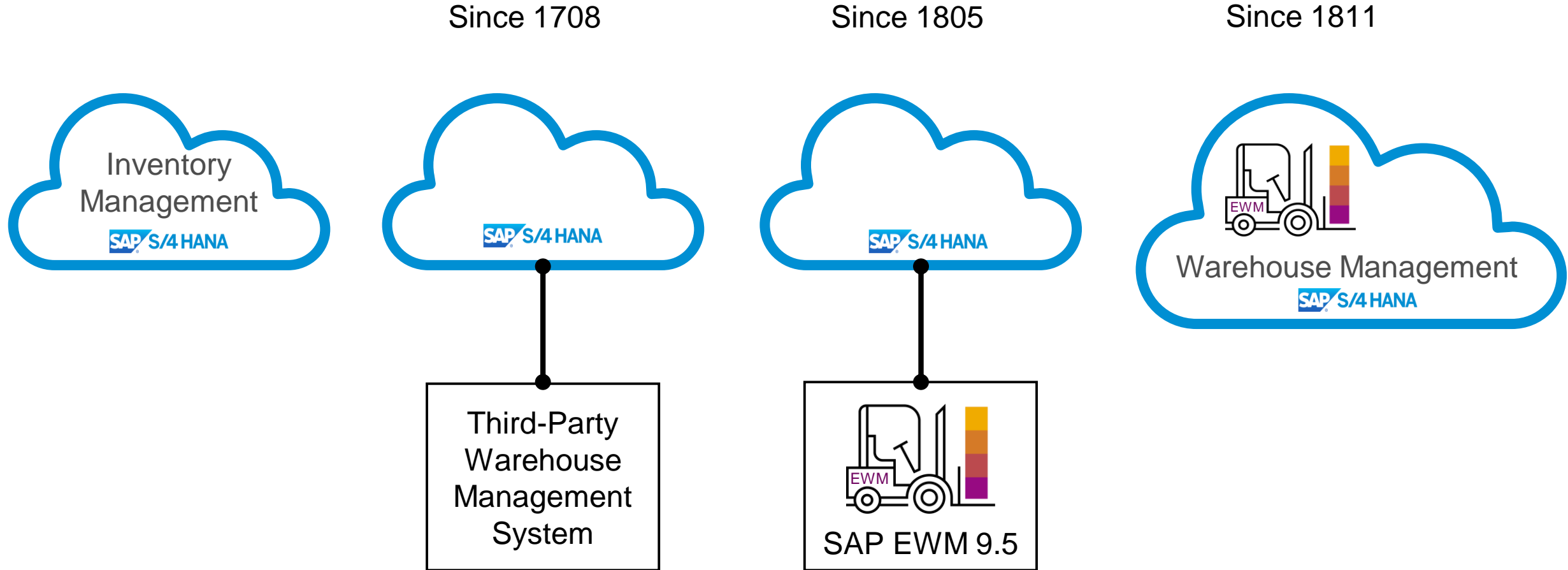
SAP S/4HANA Cloud - Warehouse Management
Scope in SAP S/4HANA Cloud 2002 Release

Inbound Processing

- ✓ From Supplier (with Quality Inspection)
- ✓ From Customer Returns (via other storage loc.)
- ✓ From other Storage Location
- ✓ From other DC / Plant
- ✓ From Production (with Quality Inspection)
- ✓ From Repetitive Manufacturing

Internal Processes

- ✓ Physical Inventory / Cycle Counting
- ✓ Internal Repacking
- ✓ Posting Changes
- ✓ Internal Movements
- ✓ Resource Management
- ✓ Replenishment

Outbound Processing

- ✓ To Customer
- ✓ Return to Supplier
- ✓ Ad hoc Goods Issue
- ✓ To other Storage Location
- ✓ To other DC / Plant
- ✓ To Production (Staging)
- ✓ Kanban Supply

Batch Managed Products / Serial Numbers / Handling Units

Best Practice Processes	Warehouse Structure	Mass Data Migration	Self-Service Configuration UIs	Roles/ Catalogs/Tiles	APIs	Output Management
12	6+4	5	19	2 / 12 / 39	5	7

SAP S/4HANA Cloud - Warehouse Management

Innovation in 2019

Available 1902

Available 1905

1811
Initial Cloud Release

Quality Inspection
Inbound Processing with Quality Management

Cycle Counting
New Physical Inventory method

Resource Management
APIs for Mobile Warehouse Tasks Execution

Kanban Supply to Production

General Storage
New Storage Type Template

Migration of Fixed Bin Assignments
New Migration Object

Process Warehouse Tasks - Picking
Fiori App

Harmonized Control Cycle

Enterprise Search
Storage Bins and Warehouse Products

SAP S/4HANA Cloud - Warehouse Management

Innovation in 2019

Available 1908

Available 1911

Goods Receipt from Repetitive Manufacturing

Warehouse Analytics

Warehouse Tasks and Outbound Delivery Orders

Replenishment

Planned Replenishment of Fixed Bins

Enhancements to KANBAN Processing

Reversal and Quantity Differences

Enhancements to Physical Inventory

Partial Save

Process Warehouse Tasks – Putaway

Fiori App

API – Read Outbound Delivery Order

Support of further process Variants (e.g. configurable Material)

API – Read Handling Units

Access/Scanning Codes for Packing

SAP S/4HANA Cloud - Warehouse Management
Innovation in 2020

**Available
2002**

**Bin Managed
Production Stock
& Synchronous
Postings**

**Attachment
Services for WM
Objects**

**Automation of
pick task
creation**

**API for
Inventory
Counting**

Serial Numbers

On Document Level

**Harmonization of
Handling Units**

- Unified HU Numbering
- Forward WM HU to
  Sales & Distribution

**Enhanced API for
Deliveries (WM)**

Update of Delivery

**Analytics for
Inbound
Deliveries**
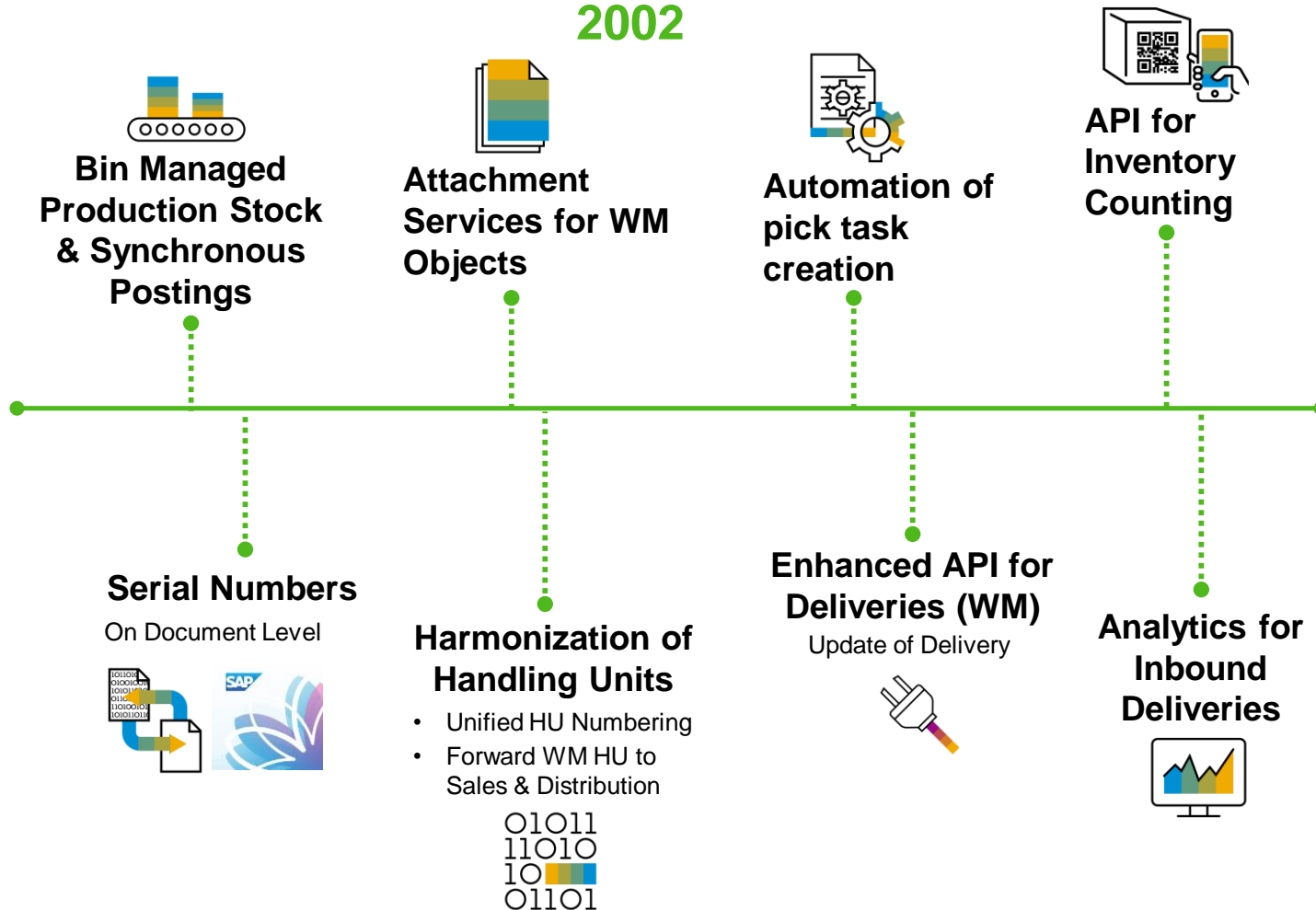
SAP S/4HANA Cloud - Warehouse Management

Best Practice Processes

ID	Scope Item Title	Initial Release
3BR	Warehouse Inbound Processing	SAP S/4HANA Cloud 1811
3BS	Warehouse Outbound Processing	SAP S/4HANA Cloud 1811
3BX	Warehouse Physical Inventory	SAP S/4HANA Cloud 1811
3DV	Warehouse Production Integration	SAP S/4HANA Cloud 1811
3BT	Warehouse Ad Hoc Goods Issue	SAP S/4HANA Cloud 1811
3BU	Warehouse Posting Changes	SAP S/4HANA Cloud 1811
3BW	Warehouse Internal Repacking	SAP S/4HANA Cloud 1811
3M0	Quality Management in Warehousing	SAP S/4HANA Cloud 1902
3VT	Warehouse Kanban Supply into Production	SAP S/4HANA Cloud 1905
3W0	Resource Management in Warehousing	SAP S/4HANA Cloud 1905
41U	Warehouse Goods Receipt from Repetitive Manufacturing	SAP S/4HANA Cloud 1908
4A2	Replenishment in Warehousing	SAP S/4HANA Cloud 1911

Lean integration between production and warehouse managed on bin level

- Lean integration between production and warehouse managed on bin level

- Increase of stock transparency as stock in production is managed on a more-granular level

- Warehouse Management (WM) managed production supply area (PSA)

SAP S/4HANA Cloud - Warehouse Management
3DV: Warehouse Production Integration – Process Overview

Warehouse Task

Goods Issue (Consumption)

Goods Receipt

Storage Type

SG01: General Storage

Production Supply Area

S105: Production Supply

Storage Type

S915: Goods Receipt from Production

SB01: Bulk Storage

Storage Type

Lean integration between production and warehouse managed on bin level

- The goods receipt can be posted directly and synchronously (without inbound delivery) in the warehouse

- Components can be consumed directly from the warehouse (without goods issue posting for the outbound delivery)

SAP S/4HANA Cloud Warehouse Management
3DV: Warehouse Production Integration – WM-Managed PSA & Synchronous Goods Movements
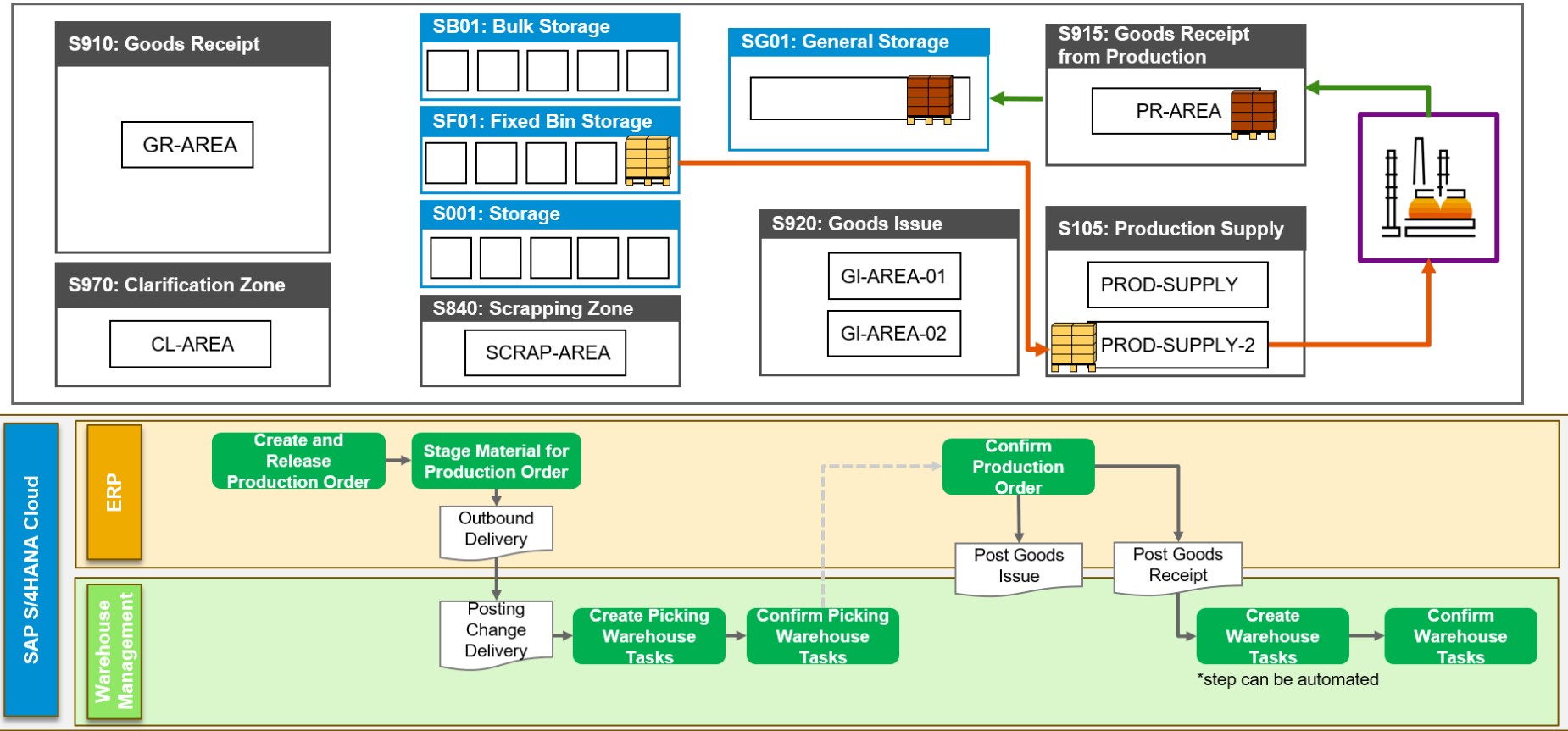
Serial Number Handling in Warehouse Management

- Improve serial number capabilities for cloud warehouse management

- Visibility: See which customers received which serial numbers

- Integration: Handle serialized products in receiving and shipping processes

- Efficiency: Only enter serial numbers when they arrive at or leave the warehouse

Attachment services in Warehouse Management

- Enable connection of all kinds of media to business documents as additional information

- Improve traceability as related documents from externals can be attached to cloud business objects in warehouse management

- Create, read, update or delete attachments using the SAP Fiori apps
  - Change Inbound Deliveries
  - Run Outbound Process
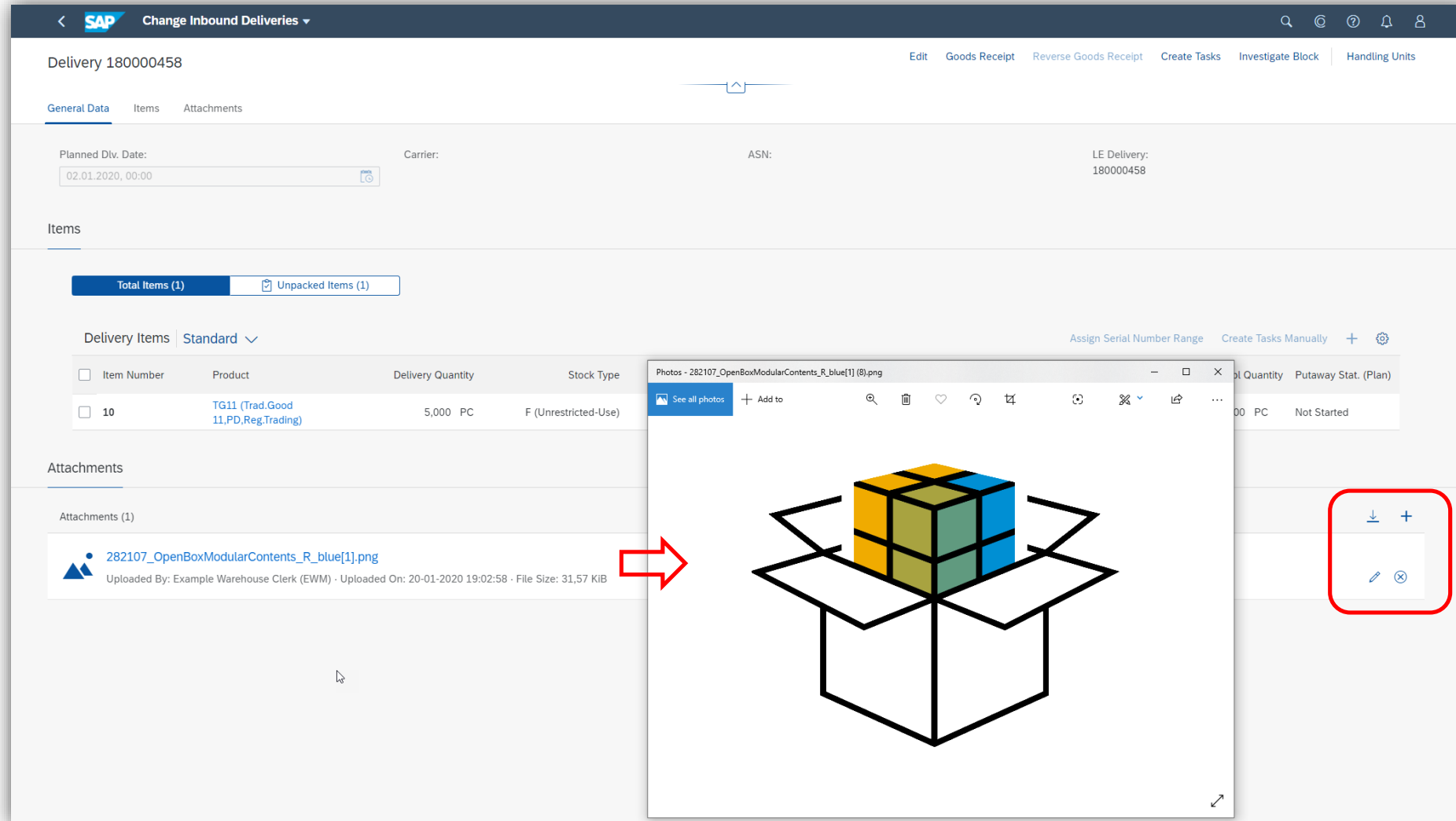
Reduce manual efforts by running warehouse task creation in the background

- Reduced manual effort by running warehouse task creation in the background
- Create pick warehouse tasks automatically in the background with defined time intervals
- Creation of single run or recurring background warehouse task creation jobs

Warehouse Management: Further innovations

- Improve warehouse analytics for inbound delivery

  The new CDS view enables you to view some aggregated data relevant to inbound delivery items.
  For example, the following data is available:
  - The number of inbound delivery items in your warehouse
  - The number of inbound delivery items that are blocked
  - The average goods receipt time of your inbound delivery items

- Enhanced automation with automatic replenishment strategy

  With this feature, you can enable the system to automatically create a replenishment warehouse task in the background to ensure that there is enough stock available for picking activities.

- Enhanced extensibility with an API for physical inventory

  With this service Warehouse Physical Inventory (A2X) (API_WHSE_PHYSINVENTORYITEM), you can count physical inventory (PI) in your warehouse. You can retrieve, count, and change PI items. You can also mark PI items as Deleted.

SAP S/4HANA Cloud - Warehouse Management

Overview of APIs in the Warehouse Management area

SAP S/4HANA Cloud – Warehouse Management

Mobile Device / App

Read **Update**

Process Warehouse Tasks

Create **Read** **Update** **Delete**

Warehouse Resource

Read **Update**

Warehouse Outbound Delivery Order

Read

Handling Unit

Read **Update**

Physical Inventory Counting

← Confirm Task 1000002607

SOURCE BIN

EXPECTED SOURCE BIN
S001-07-02-ZAL

SCANNED SOURCE BIN
...

PRODUCT

EXPECTED PRODUCT
TG12

SCANNED PRODUCT
...

REQUESTED QUANTITY
1

ACTUAL QUANTITY
...

Release Highlights
Inventory Management

Inventory Management: Cycle counting as part of the physical inventory process

- Improve operational efficiency by classifying materials for cycle counting as part of the physical inventory process

- Increase inventory accuracy; for instance, because fast movers can be counted more often

- Manage classifications for materials in stock based on the cycle-counting settings maintained in the self-service configuration UI "Cycle Counting"

Release Highlights
Quality Management

Quality Management: Resolve internal problems by using the 8D methodology

- Consistent and standardized handling of problems by using the 8D methodology and its predefined process steps
- Achieve transparency on all processes related to the issue
- Identify, correct, and eliminate recurring problems
- Create the problem-solving process with reference to a defect

Quality Management: Inspection results recording for serialized materials

- Record the results for characteristics flexibly and effectively in inspection lots for both serialized and non-serialized materials

- Results recording for characteristics with single results in an inspection lot with a serialized material is done on the result details page

Release Highlights
Production Planning and Execution

SAP Fiori app to reprocess failed material movements

- List of unsuccessful materials movements along with the related error messages
- Identify why the material movements failed
- Replace the storage location, batch, posting date
- Reprocess failed material movements

Enhancements for predictive material and resource planning (pMRP)

Manage component forecasts for suppliers

- The **Simulation Components** view lists all material components of a simulation
- Switch between the **Materials** and the **Supply** perspectives
- Review **Planned component consumption** based on simulated changes
- Export to **Excel** to share forecast with stakeholders

Enhancements for predictive material and resource planning (pMRP)

Aggregated capacity plan for work center groups

- Choose to **group** the capacity plan
- Review the **aggregated** remaining capacity
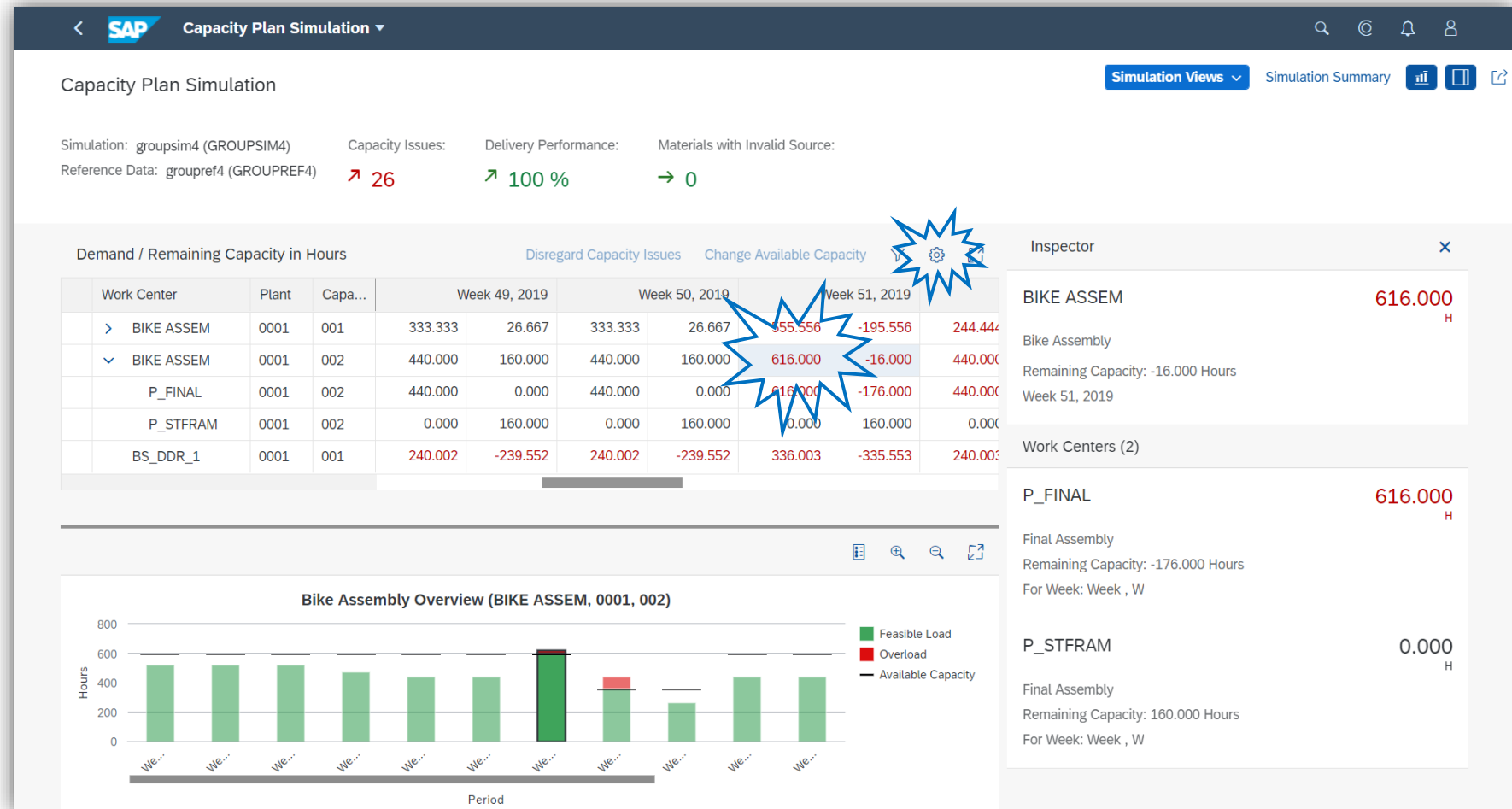
Enhancements for predictive material and resource planning (pMRP)
Transfer Component Forecast (PIRs) for subassembly planning

- Choose **PIR version** to decide if they are considered for operative MRP

Enhancements for Schedule Production
New Filters: Setup Group Key and Category

Enhancements for Schedule Production

Setup Group Information

Enhancements for Schedule Production
Insert Operation

Enhancements for Schedule Production
Advanced Variant Configuration (AVC) integration

Enhancement for Manage Work Center Capacity
New Filter for Work Center Group + Reschedule Button

Enhancement for Monitor Work Center Schedules

Non working time
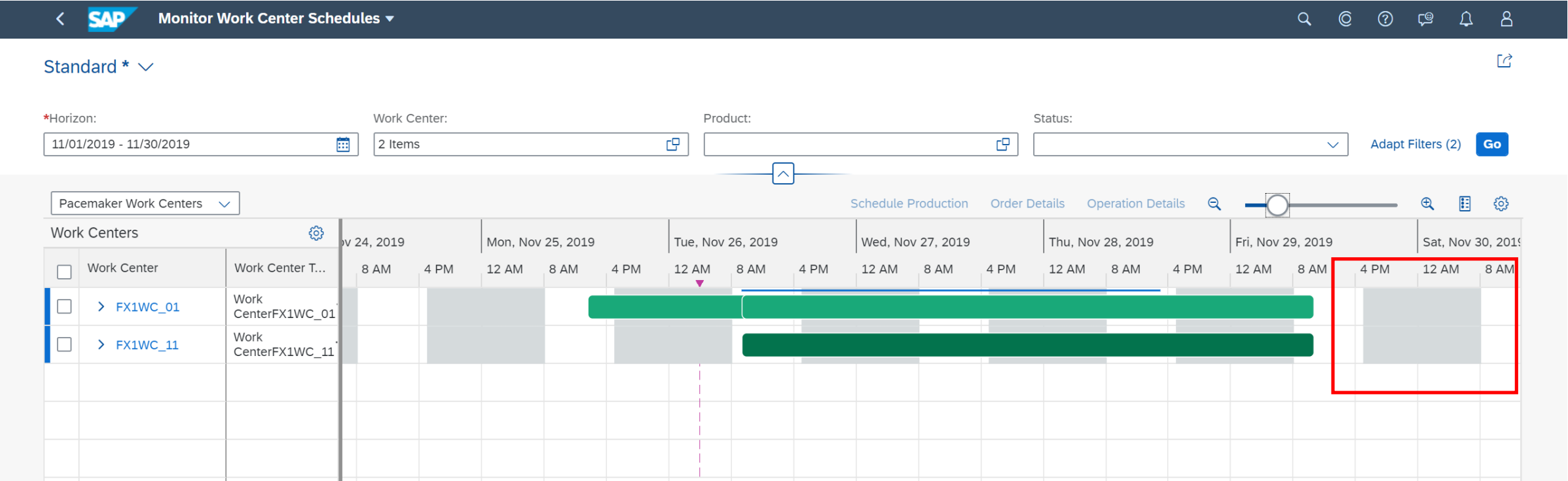
Enhancement for Monitor Work Center Schedules

Process Industry – Operation Detail

Production Execution: Integation

- **SOAP API** Manufacturing Order – Send enhanced to handle characteristics, long texts, operation status, additional fields like MateriaIsCoProduct, DebitCreditCode, InventorySpecialStockType

- **ODATA API Production Order (Version 2)**
  This API is the successor of the deprecated API Production Order (Deprecated). Note: Some improvements in version 2 are incompatible changes compared to version 1.

- OData service based Read API for **Master Recipe**
- OData service based Read API for **Production Routing**
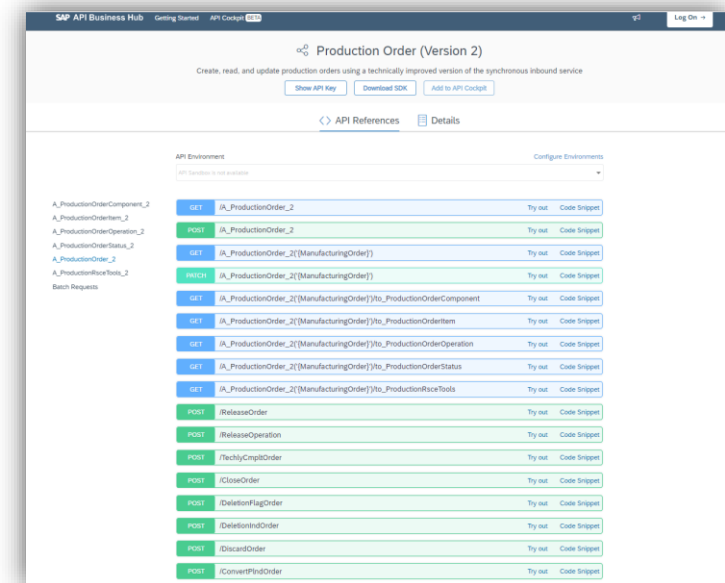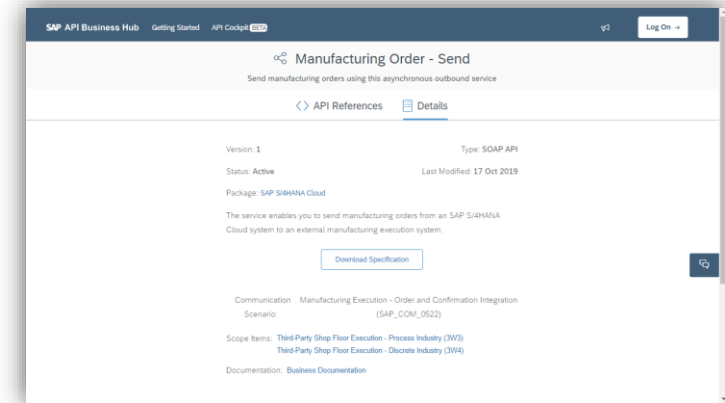
Release Highlights
## Asset Management

SAP S/4HANA Cloud for Asset Management
Resource Scheduling for Maintenance Planners

- New SAP Best Practices scope item 43R
- Added value to Asset Management
- Maintenance Scheduling
- Simulations and Versioning
- Collaboration

Improving Resource Management and Maintenance Scheduling Using SAP Sof...
youtube.com
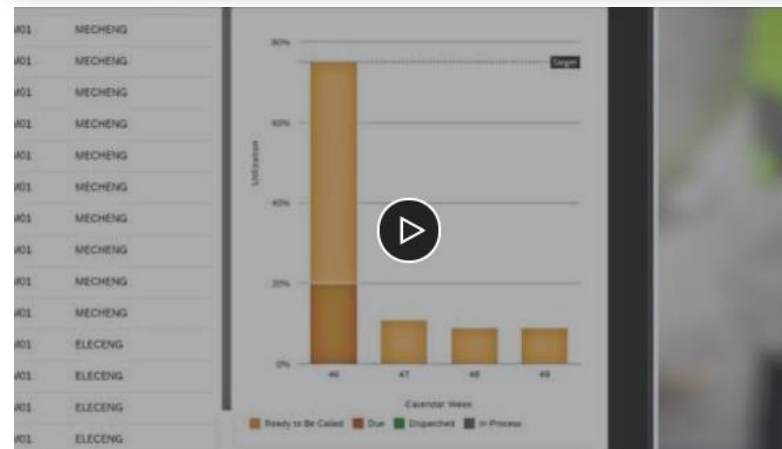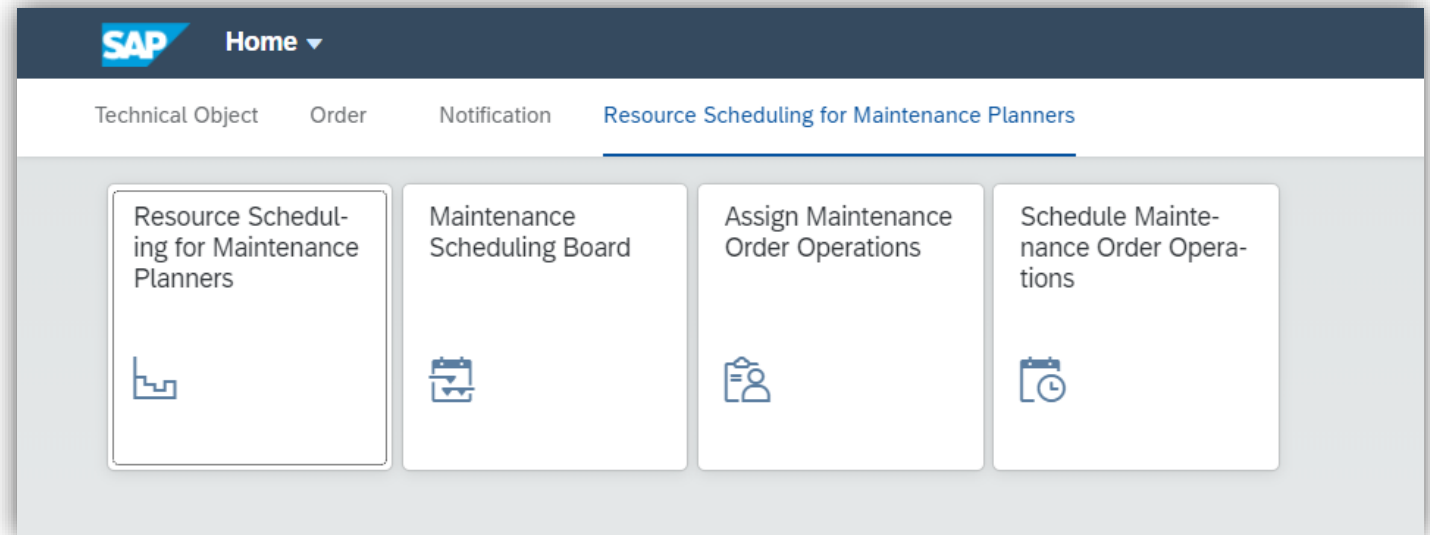
Resource Scheduling for Maintenance Planners

- Overview of important KPIs like due maintenance orders, schedules and work center utilization in real time at a glance
- Monitor important KPIs for your work centers
- Navigation into transactional data
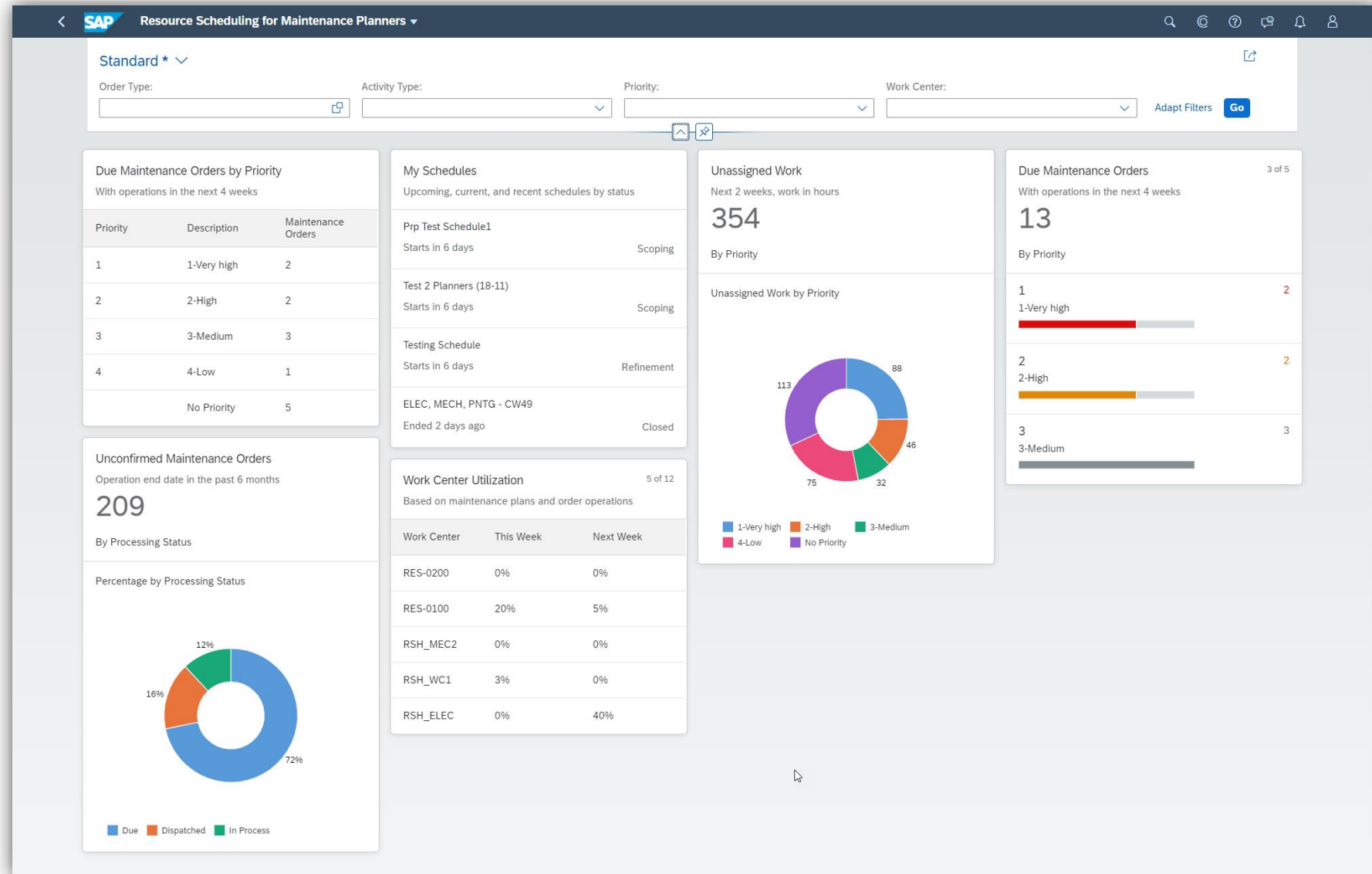
Manage Work Center Utilization

- Analyze and manage the utilization of your work centers

- Visualize utilization based on various attributes, such as work center, processing status, priority, or order type

- Navigate to orders, technical objects, and functional location data

- Dispatch order operations
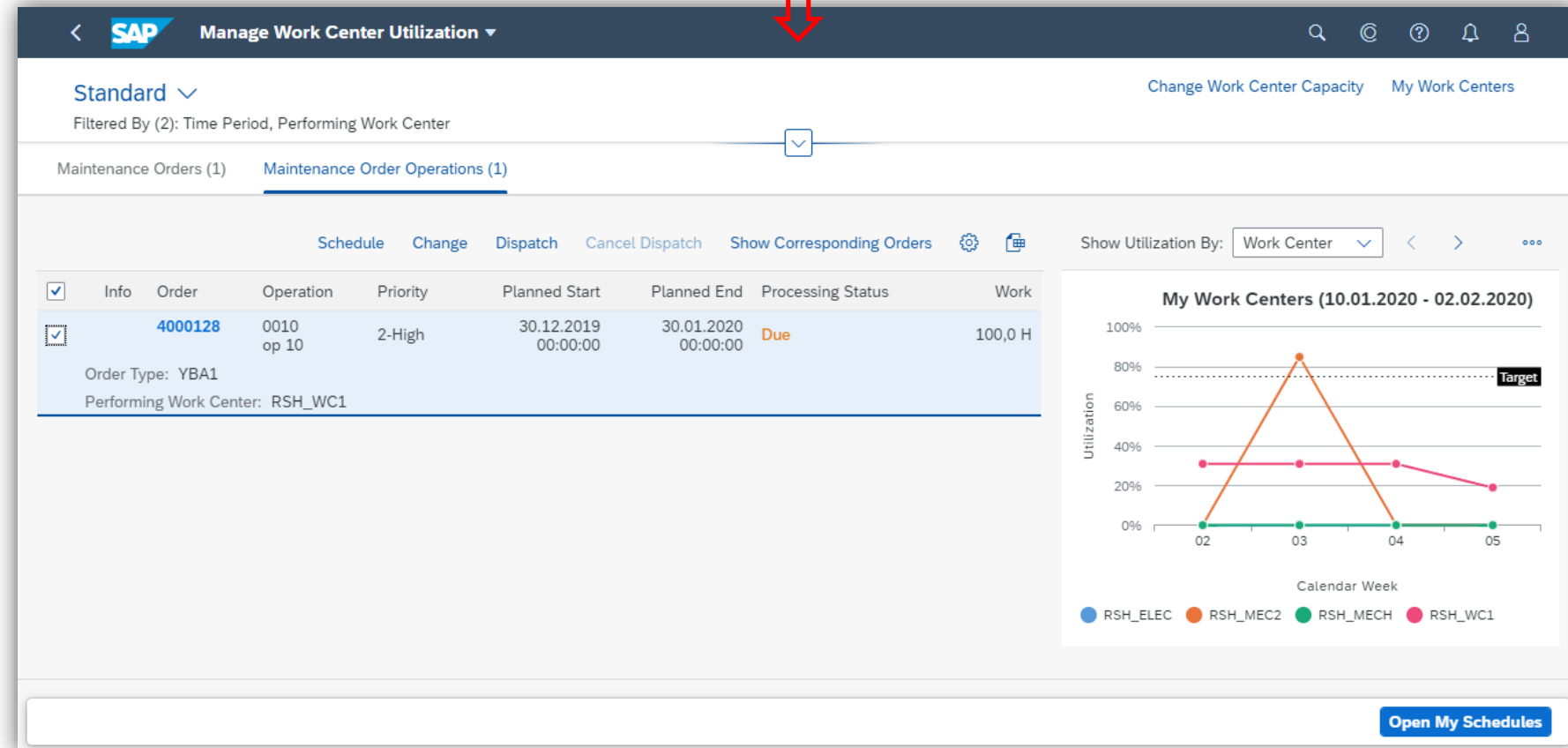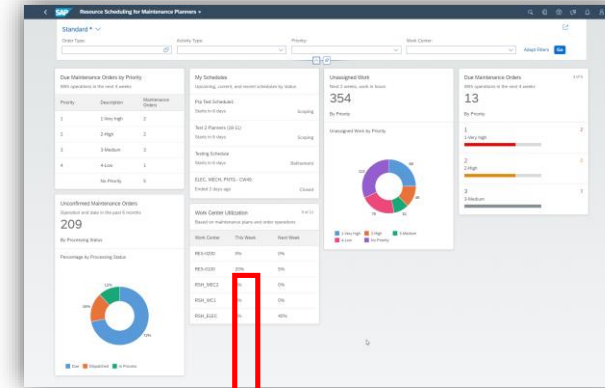
Schedule Maintenance Order Operations

- Set up schedules for the maintenance order operations
- Monitor and review schedule execution
- Level work center utilization
- Use a graphical view to identify scheduling conflicts

Maintenance Scheduling Board

- Visualize on a timeline the maintenance orders, order operations, and suboperations in your work centers via Gantt chart

- View relationships between order operations and relationship violations

- Dispatch order operations and suboperations

- Navigate to orders, equipment, and functional location
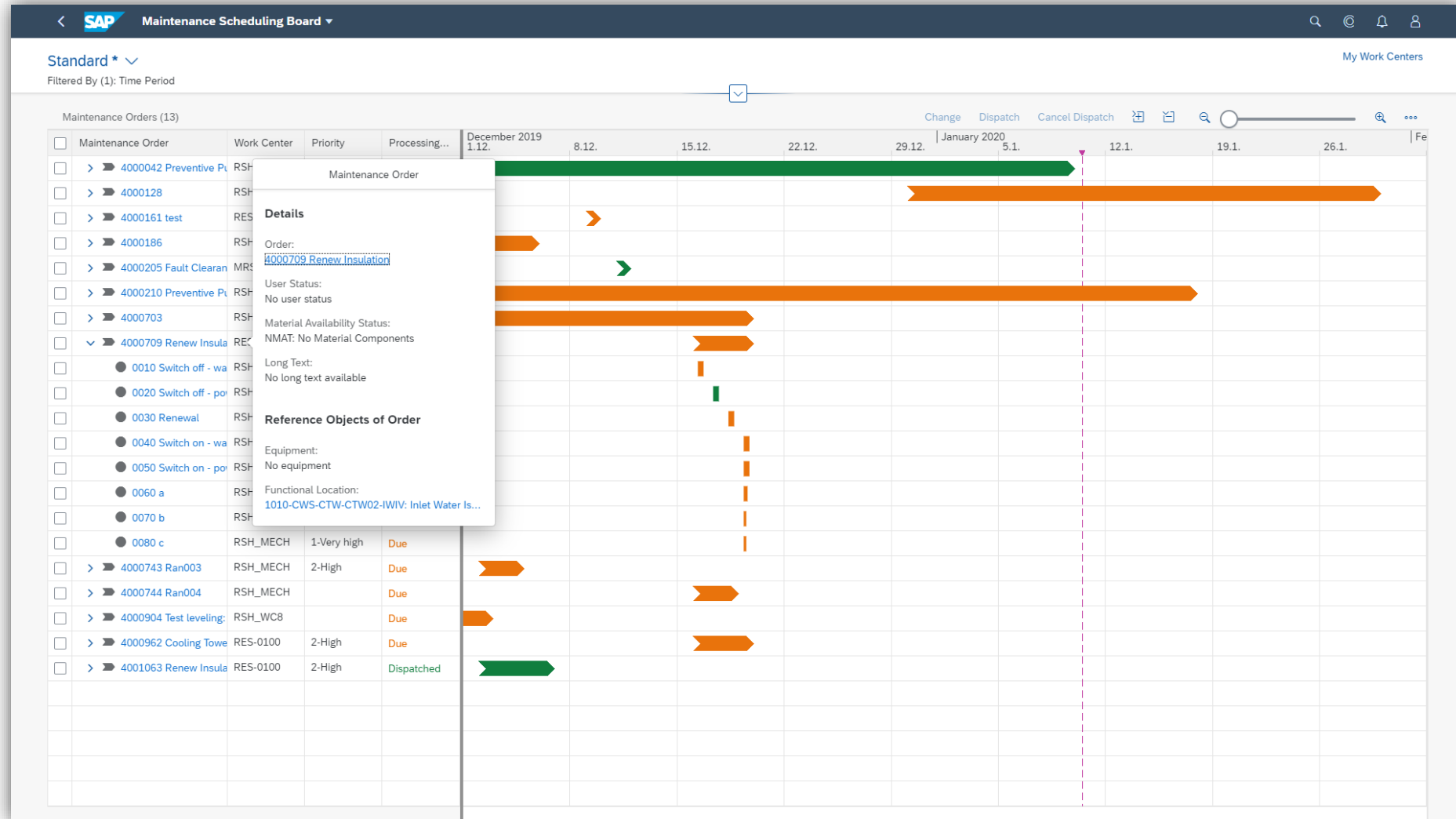
Assign Maintenance Order Operations

- Manage the personal responsibility of maintenance order operation
- Assign maintenance order operations to a person responsible
- Change or delete assignments

SAP S/4HANA Cloud 2002
Localization

43 Countries *

Australia, Austria, Belgium, Brazil, Canada, China, Czechia, Denmark, Finland, France, Germany, Hong Kong, Hungary, India, Indonesia, Ireland, Italy, Japan, Luxembourg, Malaysia, Mexico (partial scope), Netherlands, New Zealand, Norway, Philippines, Poland, Portugal Romania, Russia, Saudi Arabia, Singapore, **Slovakia,** *new* South Africa, Spain, South Korea, Sweden, Switzerland, Taiwan, Thailand, Turkey, United Arab Emirates, United Kingdom, United States

More Information available on Country Versions: Release Information & Restriction Note: 2785449

25 languages
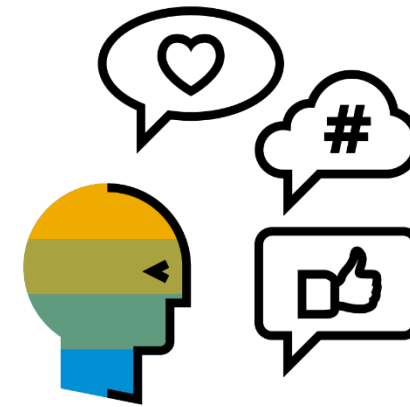
Arabic, Chinese (simplified), Chinese (traditional), Czech, Danish, Dutch, English, Finnish, French, German, Hungarian, Italian, Japanese, Korean, Malay, Norwegian, Polish, Portuguese, Romanian, Russian, Spanish, **Slovak** *new*, Swedish, Thai, Turkish

** Localized country versions might not include all available solution scope. Please select your country version in the SAP Best Practices Explorer to see the available solution scope for a specific country. For localization specific features please see the SAP Help Portal for SAP S/4HANA Cloud and navigate to Product Assistance and Country-Specific Functions

Preparing for 2002: Next Steps

- [Sign up](#) to watch other 2002 early release webinars live or on demand

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- View latest [SAP S/4HANA Cloud Release Info](#)

- View [upgrade schedule for SAP S/4HANA Cloud](#)

- View [SAP service level agreement](#)

- Read about [upgrade specific frequently asked questions](#)

Where to go for more information?

Learn

SAP S/4HANA Cloud Release Info

Latest release highlights including videos and blogs

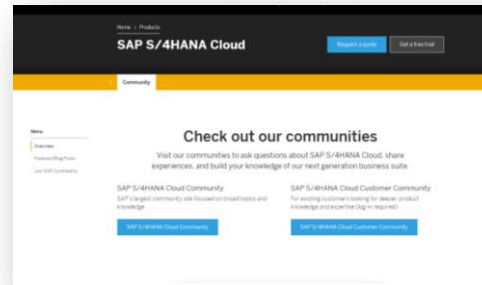### Learning Journeys

Learning Room

Stay Current Program

Learn more about digital learning opportunities

Engage

SAP S/4HANA Cloud Community

Ask questions, share experiences, and build your knowledge of our next generation business suite

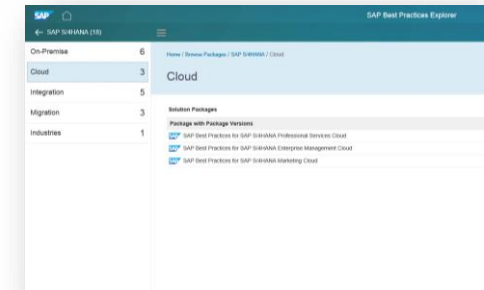### SAP Help Portal

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New Podcast "Inside SAP S/4HANA"

Implement

Best Practices Explorer

Benefit from predefined business processes & search, browse and consume SAP Best Practices

SAP Transformation Navigator

Roadmap Viewer

SAP S/4HANA Cloud Trial

Thank you.

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